



Amendments to the Claims:

The following claims will replace all prior versions of the claims in this application (in the unlikely event that no claims follow herein, the previously pending claims will remain):

1-21. (Cancelled).

22-27. (Cancelled).

28. (Previously presented) A method of mixing a plurality of components, comprising:
a) introducing components into a mixing vessel;
b) mixing said components by rotating or oscillating the mixing vessel;
c) non-invasively monitoring the contents of the vessel during said mixing with a monitor that collects spectroscopic data, and
d) storing said spectroscopic data on a data storage device, wherein said data storage device is mounted on said oscillating or rotating mixing vessel.

29-67. (Cancelled).

68. (New) A method of mixing a plurality of components, comprising:
a) introducing components into a mixing vessel;
b) mixing said components by rotating or oscillating the mixing vessel; and
c) monitoring the contents of the vessel during said mixing by means of a monitor which rotates or oscillates with the vessel.

69. (New) The method of Claim 68, wherein said monitor collects spectroscopic data.

70. (New) A method of mixing a plurality of components, comprising:
a) introducing components into a mixing vessel;
b) mixing said components by rotating or oscillating the mixing vessel; and
c) monitoring the contents of the vessel during said mixing, wherein said mixing vessel has an axis of symmetry about which it is substantially symmetrical; and said mixing vessel is rotated or oscillated about an axis that extends obliquely relative to said axis of symmetry.

71. (New) The method of Claim 70, in which the vessel comprises an Intermediate Bulk Container (IBC).

72. (New) The method of Claim 68, wherein said vessel is an Intermediate Bulk Container.

73. (New) The method of Claim 68, further comprising modifying said mixing in response to at least one signal.

74. (New) The method of Claim 73, wherein said modification comprises discontinuing rotation or oscillation of the vessel.

75. (New) The method of Claim 69, further comprising storing said spectroscopic data on a data storage device.

76. (New) The method of Claim 75, wherein said data storage device is mounted on said oscillating or rotating mixing vessel.

77. (New) The method of Claim 76, further comprising transferring said data from the data storage device to a data acquisition device after rotation or oscillation of the vessel has been discontinued.

78. (New) The method of Claim 77, wherein, after rotation or oscillation of the vessel has been discontinued, the monitor is physically relocated to and docked with the data acquisition device.

79. (New) The method of Claim 69, including transferring the data from the monitor to an off-board data storage or a data acquisition device during the mixing process.

80. (New) The method of Claim 68, wherein said components include at least one pharmaceutical component.

81. (New) The method of Claim 68, wherein said components include at least one lubricant.

82. (New) The method of Claim 68, wherein said monitor comprises an acoustic optic tunable filter to produce, from a broad band radiation source, radiation at a wide range of different wavelengths and/or within different bands.

83. (New) A method of mixing a plurality of components, comprising:

- a) introducing at least one component into a mixing zone;
- b) mixing said at least one component, while monitoring at least one condition by collecting spectroscopic data, to form a mixture; and
- c) mixing in at least one additional component to said mixture while monitoring said at least one condition.

84. (New) A method as claimed in Claim 83 further comprising: mixing the at least one component within said vessel by rotating or oscillating the vessel, while monitoring a condition of said at least one component by collecting spectroscopic data representative of such condition; determining that said condition has attained a first desired value; adding said at least one additional component to the mixing vessel; further mixing the components within said vessel while collecting spectroscopic data; and determining that said condition has attained a second desired value.

85. (New) The method of Claim 84, wherein said at least one component comprises a pharmaceutical component, and wherein said at least one additional component comprises a lubricant component.

86. (New) An apparatus for mixing a plurality of components, comprising:

- a) a mixer;
- b) at least one spectroscopic monitor for repeatedly scanning the contents of the mixer to obtain and record data for use in monitoring changes in the spectroscopic profile;
- c) a control device in communication with said at least one spectroscopic monitor to control mixing; and

d) a docking station for receiving said monitor and allowing transfer of data from the monitor to a data acquisition device.

87. (New) The apparatus of Claim 86, wherein the monitor is a portable unit adapted for detachable mounting on a wall of the mixer that, on completion of the mixing cycle, the monitor can be dismounted and transported to the docking station.

88. (New) The apparatus of Claim 87, wherein the mixer comprises at least one guide rail for mounting the portable unit in a desired position.

89. (New) The apparatus of Claim 86, wherein the monitor is provided with at least one handle.

90. (New) Apparatus for mixing a number of components comprising a vessel for receiving the components, drive means for rotating or oscillating the vessel about an axis to effect mixing of the components within a vessel, and at least one spectroscopic monitoring means for repeatedly scanning the mixture to obtain data for use in monitoring changes in the spectroscopic profile of the mixture as mixing proceeds, the monitoring means being mounted off-axis relative to the axis about which the vessel is rotatable or oscillatable.

91. (New) A method as claimed in Claim 70 comprising introducing the components into an Intermediate Bulk Container (IBC) which constitutes said mixing vessel, rotating or oscillating the IBC to effect mixing of the components and monitoring mixing by collecting spectroscopic data from the mixture.

92. (New) A method as claimed in Claim 83 comprising: introducing said at least one component into the mixing zone and in a first phase of operation effecting mixing while monitoring the condition of said at least one component by collecting spectroscopic data representative of such condition; and on detection that said at least one component has attained a desired condition adding at least one additional component to the mixing zone and, in a second phase of operation, effecting mixing while monitoring the condition of the mixture as supplemented with said additional component by collecting spectroscopic data representative of such a condition to determine the attainment of a desired condition of said supplemented mixture.

93. (New) A method as claimed in Claim 83, comprising: introducing said at least one component into a mixing vessel providing said mixing zone and, in a first phase of operation rotating or oscillating the vessel while monitoring the condition of said at least one component by collecting spectroscopic data representative of such condition; and, on detection that said at least one component has attained a desired condition adding at least one additional component to the mixing vessel and, in a second phase of operation, rotating or oscillating the vessel while monitoring the condition of the mixture as supplemented with said additional component by collecting spectroscopic data representative of such condition to determine the attainment of a desired condition of said supplemented mixture.

94. (New) A method as claimed in Claim 92 in which the first phase comprises partial blending of components including at least one pharmaceutical component while the second phase involves the addition of a lubricant component.